

Appl. No. 09/851,757; Docker No. US018047
Amtd. dated September 9, 2005
Office Action of August 11, 2005

Amendments to the Claims

1. (*Currently Amended*) A keypad security circuit comprising:

a ~~compariter (410)~~ comparator adapted to perform a bit wise comparison of an driver signal and a resulting signal;

a column output driver (421) coupled to said ~~compariter~~, comparator, said column output driver coupled adapted to drive a keypad strong driver signal on a column;

a row output driver (422) coupled to said ~~compariter~~, comparator, said row output driver adapted to drive an keypad strong driver signal on a row;

a programmable column word constructor (430) coupled to said row output driver, said programmable column word constructor adapted to provide a weak driver signal on a column; and

a programmable row word constructor (440) coupled to said column output driver, said programmable row word constructor adapted to provide a weak driver signal on said row.

2. (*Original*) The keypad security circuit of claim 1 wherein a set of digital values randomly varies over both the bits in each digital word and overtime.

3. (*Currently Amended*) The keypad security circuit of claim 2 wherein a set of random digital values is from a register file (310) and are sequentially sent to the columns and rows as said column strong driver signal and said row strong driver signal.

3. (*Original*) The keypad security circuit of claim 2 wherein said column strong driver signal and said row strong driver signal both connect to the same bits from said register file.

4. (*Currently Amended*) The keypad security circuit of claim 2 wherein said register file is updated at random times or by significant events such as key presses ~~keypresses~~.

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5. (*Original*) The keypad security circuit of claim 2 wherein said weak driver signals are changed to be independently pulled up or pulled down to support random bit values on each of said rows and columns.

6. (*Original*) The keypad security circuit of claim 2 wherein said column strong driver signal is a logical zero value when an opposing row weak driver signal is a logical one value.

7. (*Original*) The keypad security circuit of claim 2 wherein a row strong driver signal is a logical one value when an opposing column weak driver signal is a logical zero value.

8. (*Currently Amended*) The keypad security circuit of claim 2 wherein said programmable column word constructor and said programmable column word constructor comprise both a pull-up (444) and a pull-down (445) that are independently enabled.

Claims 9-14 (*Cancelled*)

Claims 15-25 (*Cancelled*)